

Technical Memorandum

To: Department of Ecology WRIA 12 Watershed Restoration and Enhancement Committee
From: Burt Clothier, LHG
Joe Morrice, LHG
Re: Water Right Screening Methodology
Date: December 1, 2020

This technical memorandum documents the methodology used to screen and select water rights for potential use to support watershed restoration and enhancement projects in the Chambers - Clover Creek Water Resources Inventory Area (WRIA) 12. This work was completed by Pacific Groundwater Group (PGG) on behalf of the WRIA 12 Watershed Restoration and Enhancement (WRE) Committee (the Committee) and the Department of Ecology (Ecology). This work was performed under Ecology Contract Number C1700029, Work Assignment PGG104.

Under RCW 90.94.030, Ecology has the responsibility to convene WRE committees and prepare WRE plans for eight WRIsAs in the Puget Sound and Hood Canal areas. The general purpose of the plans is to document and offset projected depletion of instream flows resulting from new, permit-exempt domestic well uses in the WRIsAs over the next 20 years.

To support development of the WRE plan for WRIA 12, PGG assisted the Committee in selecting a focused set of water rights for further review to assess potential benefits and suitability in offsetting impacts from permit-exempt wells on instream flows. This memorandum outlines the methodology used to develop the focused list of water rights.

PROCEDURE

Ecology staff queried their Water Rights Tracking System (WRTS) database and provided tables and associated GIS data of all active water rights within WRIA 12. Inactive water rights (e.g., previously approved changes, cancelled or withdrawn applications) were excluded from the data provided by Ecology. Water right claims and pending applications for new water rights or water right changes were also excluded.

The GIS data included the mapped place of use and point(s) of diversion or withdrawal locations, where available. Where Ecology does not have detailed location information for points of diversion or withdrawal, or such has not yet been added to their dataset, the default location is typically the nearest quarter or quarter-quarter section, based on the water right file information.

The Committee's desire was to identify classes or groups of water rights that could potentially be converted, purchased, or retired as mitigation water. The hope being that rights in key sub-basins

could be found that, if applicable and available, could be use to off-set the projected impacts of future permit exempt wells and/or provide an environmental benefit to local surface water bodies. Such mitigation projects require the combination of available water (legally and physically), willing seller and buyers, and methods to apply the water to the proposed mitigation purpose. This ranges from simply retiring the right back to the State where no further action is assumed and the water simply ceases to be used for its prior purpose up to more complex efforts where a right is changed to a new use or a new location (or both) and directly applied to the mitigation project (e.g. streamflow augmentation or groundwater recharge).

The tables of active water rights included over 2,700 water right files within WRIA 12. Following consultation with the Committee, PGG limited the water rights under consideration to certificates and permits¹ that included commercial and Industrial (CI), stockwater (S), or irrigation (IR) uses. Municipal and domestic (or multiple domestic) categories were excluded based on the expectation that these rights would not be available for conversion into sources of mitigation water. Irrigation rights were also classified based on the reported irrigated acreage.

The list of active water right permits and certificates was further reduced by removing any with a priority date later than the December 12, 1979 adoption date of Chapter 173-512 WAC, the in-stream flow rule for WRIA 12.

The list of active permits and certificates with CI, IR, and/or ST uses was reduced again based on authorized instantaneous (Qi) and annual (Qa) quantities. Water rights with both a Qi of less than 0.1 cfs (45 gpm) and a Qa of less than 10 acre-feet per year were excluded from further consideration. This was an arbitrary cut-off intended to focus the search toward high-value possibilities over smaller ones and provide for more manageably sized lists.

At the direction of the Committee, water rights within the Clover Creek subbasin were prioritized for evaluation. Fifty-seven water rights meeting the above criteria were identified in the Clover Creek subbasin. The Committee reviewed this initial list and provided feedback and commentary. The final list was reduced to 25 water rights for consideration of their potential as sources of mitigation.

The Committee has identified several options to provide the desired offset targets for the watershed. As these projects do not include or require water right related projects, the Committee decided to retain the water right list as a supplemental source of information.

¹ This includes certificates, certificates of change, permits, and superseding permits.